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THIS IS AN ILLUSTRATED LETTER FROM

## THE MICHAEL-LEONARD CO.

## Showing you how to have the Best Garden you ever had

Dear Friend:

We're not going to start this letter by telling you how important it is for everyone to grow a garden this year. We're sure you already know all about that, or you wouldn't have shown your interest in better vegetable gardening by writing us.

What you want to know is how to raise a really <u>victorious</u> Victory Garden. And that is what we propose to help you do in this letter — to give you a few gardening helps and hints that will make your garden more sure of success.

Let's start right now by trying to find....



Where had you thought of planting your garden this year? In the same place as last year — or do you think you know of a better place, a place that will be handier and more productive? Or, think a moment, do you really know the right way to choose a location for your garden — the scientific way?

One of the reasons so many gardens don't do as well as they might is because they simply aren't planted in the right places....in places suitable for best vegetable growth. To help you find the best possible spot for your garden, locate it according to these five points:

1. SIZE. Be sure it's large enough for every member of your family to have fresh vegetables every day during the growing season, and also for you to have enough vegetables for canning and storage.

Most gardeners find that in order to have a garden large enough for that, there should be approximately 25 to 30 feet



"How deeply seated in the human heart is the liking for gardens and gardening."—Alexander Smith.









"That God once loved a garden We learn in Holy Writ. And seeing gardens in the Spring I well can credit it."



of each row for each member of the family. For example, if you have five people in your family your garden rows will be about 150 feet long. If you have six people the rows will be about 175 feet long, and so on.

Of course, this is the ideal size. Everyone cannot have a garden this large, particularly folks living in the city. You should, however, plan your garden to be as near the ideal size as possible. You then will be more sure of getting all the vegetables your family will need both summer and winter.

The width of your garden depends on how many rows you are going to have and how you are going to cultivate — with hand tools or horse-drawn equipment. If you are going to use a two-horse cultivator, plan your rows about 3½ feet apart. Or, if you are going to use a hand or wheel-hoe, a space of 16 to 18 inches is plenty. This is also suitable width between rows if you are going to irrigate your garden.

## 2. Locate your garden where it will have PLENTY OF MOISTURE.

There is hardly anything so important in vegetable growing as MOISTURE. If possible, irrigate your garden. Or, that not being possible, try to locate it near somewhat higher ground so the water running off



can be directed through your garden. Yet, at the same time, be sure your garden plot is well-drained and does not hold water, keeping the ground cold and wet. The soil should always contain enough moisture so the vegetables can take up all they need, but the soil must not be kept wet, you must not have free water in the soil. Avoid planting near large trees because their roots run out many feet and rob the garden of needed moisture and fertility.

If you live in a dry area and if you must plant your garden in a dry place where it will not receive much natural moisture, and if you cannot irrigate it, allow more space between the rows than is generally practiced. Each vegetable constantly is taking water from the soil — the wider the space between rows the more moisture is available for each plant.

If you live where hot, scorching south winds are common, plant your garden where it will have a good windbreak on the south. If you live in a northern clime, however, where summers are fairly cool, a windbreak on the <u>north</u> is recommended. Sometimes a grove, an orchard, a hill, a set of buildings, a board fence, or even a lot of corn stalks set along a fence-row will do the trick.

#### 3. Choose the best piece of ground you can....

....and the best piece of ground for vegetable growing is one of deep, rich humus-containing loam. Soil like that holds the moisture well and it gives your plants the food they need.

If you do not have such ground available build it up with well-rotted manure, commercial fertilizer, or prepared plant food.

## Here are 4 GARDEN PLANS for You

(From Bulletin 522, University of Illinois, Dept. of Agriculture).

"It is impossible to work out garden plans that will fit all families. The four plans submitted here should, however, prove useful as guides in making individual plans."

#### SMALL KITCHEN GARDEN - INTENSIVE CULTURE: 30 BY 25 FEET

Providing the basic vegetables required by a small family

Planting	Row No. and width	30 feet							
	1-12"	Early peas (Snap beans late)							
	2-12"	Second early peas (Lettuce and kohlrabi late)							
	3-12"	Spinach (Spinach late)							
lst	4-12"	Leaf lettuce (Spinach late)	Turnips (Spinach late)	Kohlrabi (Spinach late)					
j	5-12"	Onion sets (Radish late)							
	6-12" Onion seed planted with radish (Turnips late)								
	7-24"	Early cabbage plants							
	8-24"	Carrots planted with radish							
2d	9-18"	N. 2 Spinach	Beets planted with radish						
	10-30"	Tomato seed							
	11-24"	Snap beans							
	12-24"	Tomato plants							
3d	13-24"	Snap beans							
	14-18"	Lima beans							
4th	15-24"	Summer squash or peppers	Cucumbe	ers or eggplant					
	18"	(Border strip)							

Crops in parentheses can be planted in the indicated rows after the early crops are harvested

#### LARGE FARM GARDEN - INTENSIVE CULTURE: 120 BY 100 FEET

Providing a reasonably complete and continuous assortment of vegetables for use fresh thruout the season, for canning and storage.

Planting	Row No. & width	2)				
	1-4'	Asparagus	Rhubarb	Perennial Onions		
	2-4'	Onion seed planted with radish				
	3-11/2	Onion sets	Spinach			
	4-3′	Early potatoes				
	5-3'	Early potatoes				
lst	6-3′	Early potatoes				
	7-3′	Early potatoes				
	B-3'	Leaf lettuce	Early turnips	Kohlrabi		
	9-11/2'	Peas				
1	10-11/2'	Peas				
	11-2'	Early cabbage seed		Head lettuce plants		
	12-2'	Early cabbage plants	*	N. 2 spinach		
2d	13-2'	8eets .	Carrots	Parsley		
20	14-11/2'	Parsnips pianted with radish		Swiss Chard		
	15-3'	Tomato seed				
	16-3'	Early sweet corn	Intermediate sweet corn	Late sweet corn		
3d	17-3′	Early sweet corn	Intermediate sweet corn	Late sweet corn		
30	IB-3'	Early sweet corn	Intermediate sweet corn	Late sweet corn		
	19-3′	Snap beans				
	20-11/2	Snap beans				
- 1	21-11/2'	Carrots		8eets		
l.	22-2'	Peppers Eggplant	Bush lima beans	Bush or pole lima beans		
	23-3′	Tomato plants				
4th	24-5'	Muskmelon				
	25-5'	Squash Cucumbers				
	26-B'	Watermelon				
	27-8'	Winter squash				
	28-8'	Sweet potatoes				
Special	29-4'	Late cabbage seed				
Special .	4'	(8order strip)				

#### MEDIUM SIZE KITCHEN GARDEN-INTENSIVE CULTURE: 60 BY 50 FEET

Providing a seasonal supply of vegetables for a small family

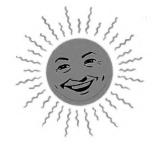
Planting	Row No.		66	0 feet —				
	1-24"	Asparagus		Rhubarb		Perennial onions		
	2-48"	Early potatoes						
	3-24"	Early potatoes						
	4-24"							
	5-24"							
121	6-24"							
7-12" Onion sets (3/4 Leaf lettuce, 1/4 kohlrabi late) Spinach (3/4 Leaf lettuce, 1/4 kohlrabi late)					½ kohlrabi late)			
					Kohlrabi (Spinach late)			
	9-18"	Peas (Radish late)						
	10-18"	Peas (Turnips late)						
- 1	11-18"	Early cabbage seed						
	12-18"	Early cabbage plants						
	13-18"	Carrots						
<b>2</b> ⁴	14-18"	Beets		Chard	N. Z. Spinach	Parsley		
Σ.	15-18"	Parsnips planted with radish			Salsify planted with rad	ish -		
	16-18"	Early cauliflower plants	Broccoli		Head lettuce plants			
	17-36"	Tomato seed						
	18-36"	Sweet corn and squash						
34	19-36"	Sweet corn and squash	1					
	20-18"	Snap beans						
	21-18"	Tomato plants				71		
4th	22-24"	Snap beans						
7	23-18"	Lima beans		Peppers	Eggplant			
[	24-30"	Sweet potatoes						
ecial*	25-30"	Late cabbage seed						
CCIAI	18"	(Border strip)						

Crops in parentheses can be planted in the indicated rows after the early crops are removed. If potatoes are dug early, Rows 2 to 5 may also be used for late planting. The special planting of late cabbage is for late fall, sauerkraut, or winter storage.

#### LARGE FARM GARDEN-FIELD CULTURE: 200 BY 120 FEET

lanting	Row No. and width	4	200 feet -		
	1-4'	Asparagus	Rhubarb		Perennial onions
	2-4'	Early potatoes			
	3-3'	Early potatoes			
	4-3'	Early potatoes			
	5-3'	Early potatoes			
1st	6-3'	Onion seed planted with radish			
	7-3'	Onion sets	Spinach		
	8-3'	Leaf lettuce	Early turnips	Kohlrabi	
	9-3'	Peas			
	10-3'	Peas			
	11-3'	Early cabbage seed			N. Z. Spinach
	12-3'	Early cabbage plants			Head lettuce plant
2ª	13-3'	Early beets	Early carrots		Parsley
2-	14-3'	Parsnips planted with radish		Swiss chard	
	15-3' Tomato seed				
	16-3'	Early sweet corn	Intermediate sweet corn	Late sweet corn	
34	17-3'	Early sweet corn	Intermediate sweet corn	Late sweet corn	
J.	18-3'	Early sweet corn	Intermediate sweet corn	Late sweet corn	
	19-3'	Snap beans			
	20-3'	Snap beans			
	21-3'	Carrots		Beets	
	22-3'	Peppers	Bush lima beans	Bush or pole lima beans	
	23-4'	Tomato plants			
4 <sup>th</sup>	24-6'	Tomato plants	Muskmelon		
	25-6'	Summer squash Cucumbers			
	26-9'	Watermelon			7
	27-9'	Winter squash			
	28-6'	Sweet potatoes		1	
1*	29-5'	Late cabbage seed			
ecial*	4'	(Border strip)			

The special planting of late cabbage is for late fall, sauerkraut, or winter storage.



#### 4. Plant your garden in the sun!

Those green, growing plants need from four to six hours of sunlight daily. If you live where summers are cool make your garden plot longest from north to south — thus plants get a more even distribution of the sun's rays throughout the day.

However, if you live where summers are hot, and there is danger from hot south winds, make it longest from east to west. Whatever you do, don't plant your garden where it is shaded throughout most of the day by hills, high trees, or buildings, and don't plant it in a low shaded spot where, because of lack of sunlight, the ground remains cold and damp.

### 5. Gardening is Easier, More Fun if you Keep it near the house.

Gardening can be a lot of work — or it can be comparatively easy. One way to make it a more enjoyable task is to plant it near the house where you can work in it at various odd moments in your day, simply by stepping out the door. By having it handy you'll work in it more and take better care of it than if it is located too far from the house. If you have a small garden near the house plant your early, small seed vegetables in it. Then if your larger space is more distant put your bulky vegetables such as sweet corn, potatoes, beans and peas out there.



Now that you know where you're going to plant your garden, what are you going to put in it?

First thing, get out your copy of the MichaelLeonard Seed catalog. Go through it page by page and jot down
the names of those vegetables the folks in your family like best.
Of course, you know you'll want some tomatoes. Tomatoes are easy
to grow, and are high in vitamins A and C. You'll want beans...
one of America's favorite vegetables. Beans, it is said, produce
more food per square foot than any other vegetable except tomatoes.
Your Michael-Leonard catalog lists 47 varieties to choose from.
And peas — everyone should plant some Michael-Leonard peas. We
have a new hybrid pea that grows big and round but stays sweet and
tender. We call it Michael's Mammoth Early June. Then there are
carrots, beets, cucumbers, cabbage, lettuce, radishes, turnips,
spinach broccoli, onions, sweet corn....

...Yes, by all means, sweet corn. Plant some Top-Flight Bantam, a newly created Michael-Leonard Hybrid Sweet Corn that was the All-America selection for 1942. It's a yellow sweet corn that's sweeter, more tender, has larger kernels and a larger ear than any yellow sweet corn you ever tried before. And when it comes to uniform growth and high yields -- will you be amazed!

We also have a hybrid white sweet corn — it's Silver Cross Bantam, with all the good flavor of yellow corn. Like all of our hybrid sweet corn varieties, it's easy growing.



Folks who still cling to old-fashioned open-pollinated varieties have so much trouble growing sweet corn. Plots wilt...plants are often weak, spindly ...ears small...and too often its too tough. But these Michael-Leonard creations resist wilt, grow remarkably uniform plants and ears, yield many times more than old open-pollinated corn, and have deeper, larger kernels that are tender and full of real corn flavor.

As you go along through your catalog you'll probably see a number

of vegetables you've never grown before. Pick out a few of these, such as Okra — it's wonderful in soups; Chinese Chihili Cabbage that makes the best tasting green salads of any cabbage you've ever eaten, and also cooks up better than most common varieties. Silver Swiss Chard, a green leafy vegetable that's easy to grow, is an excellent source of Vitamin A, and just the thing to feed folks who don't like spinach. You might also grow some parsley. It's not only great for dressing up meats and potatoes, making your meals more attractive, but the doctors tell us it's a valuable source of health-giving vitamins.

When you have your list of vegetables completed you must then decide how much of each vegetable to plant. You must consider the eating habits of your family, and the amount of space you have in your garden. To help you we are reproducing here two tables — A and B.

	SEASON HERENINGS		William Co.	
1	Feet	Distance	Depth	Amount
Kind of	of	apart	of	of
vegetable	tow	in row	planting	seed *
		111 1011	prantang	
Asparagus	150	2 ft.	5-6 in.	75 roots
Beans—greenpod	100	3 in.	1-3 in.	1 lb.
Beans—wax	150	3 in.	1-3 in.	1½ lb.
Beets	150	4–5 in.	$\frac{1}{2}-1\frac{1}{2}$ in.	1½ oz.
Cabbage early	50	18 in.	½ in.	1 pkt.
Cabbage midseason	50	18 in.	½ in.	1 pkt.
Cabbage late	150	2 ft.	½ in.	1 pkt.
Carrots early	75	3-4 in.	$\frac{1}{2} - \frac{3}{4}$ in.	½ oz.
Carrots late	75	4-6 in.	$\frac{1}{2} - \frac{3}{4}$ in.	½ oz.
Cauliflower	50	18 in.	¾ in.	l pkt.
Celery	150	6 in.	½ in.	½ oz.
Cucumbers	38	5 ft.	1-2 in.	l pkt.
Eggplant	75 .	18 in.	½ in.	l pkt.
Horse radish	19	18 in.	4-6 in.	10 roots
Kohlrabi	150	4-6 in.	$\frac{1}{2}-1$ in.	1/8 oz.
Lettuce	75	6 in.	$\frac{1}{2} - \frac{3}{4}$ in.	½ oz.
Muskmelon	50	5–7 ft.	½ in.	1 pkt.
Onions early (seed)	150	3 in.	2-3 in.	3 lbs. sets
Onions late	150	3 in.	½ in.	1½ oz.
Parsley	10	3-6 in.	¼ in.	1 pkt.
Parsnips	75	6 in.	$\frac{1}{2}$ -1 in.	½ oz.
Peas, early	75	1-2 in.	1-3 in.	¾ lb.
Peas, medium	75	1-2 in.	1-3 in.	¾ 1b.
Peas, late	150	1-2 in.	1-3 in.	1 ½ lb.
Peppers	38	18 in.	½ in.	l pkt.
Potatoes, early	150	8-15 in.	3-4 in.	15 Îbs.
Radishes	75	2-3 in.	$\frac{1}{2}-1$ in.	¾ oz.
Rhubarb	102	2 ft.	5-6 in.	50 roots
Salsify	65	4-6 in.	$\frac{1}{2}-1$ in.	¾ oz.
Spinach	150	6 in.	1-1½ in.	1½ oz.
Squash, summer	50	10 ft.	1-2 in.	½ oz.
Squash, winter	50	10 ft.	1-2 in.	½ oz.
Sweet corn (drilled)	900	8-12 in.	1-2 in.	2 lbs.
Swiss chard	50	6-12 in.	½-1½ in.	2 pkt.
Tomatoes	150	4-5 ft.	½ in.	l pkt.
Turnips	200	4-6 in.	$\frac{1}{2} - \frac{3}{4}$ in.	2½ oz.

These seed quantities, except with potatoes, onion sets and perennial crops, are somewhat excessive when soil conditions are ideal and the seed germinates well.

TABLE A

AND TABLE B

ARE FROM
BULLETIN 1211,
NEBR. COLLEGE
OF AGRICULTURE





Table A shows how much space in your garden each vegetable requires, Table B gives you some idea as to the approximate yield you can expect from some of the crops.

"For everything we must have a plan." -- Napoleon.

Before you plant your garden, plan it. It's easier to correct mistakes on paper than in the ground. It's better to have your garden just the way you want it than to end the season saying, "Well, next year I'm certainly going to do all this differently."

Let's start by listing the vegetables somewhat according to planting dates.

First, here is a list of those crops you can plant between the latter part of March and April 15, depending upon whether you live in a warm or cool section.

Radishes
Broccoli
Brussels Sprouts
Early Cauliflower
Turnips
Parsley

Kind	Amount of seed	Average production <sup>1</sup>
Beans, bush	2 lbs.	40–70 lbs.
Beans, Lima	1 lb.	30–40 lbs.
Beet'	1½ oz.	75 lbs.
Cabbage <sup>8</sup>	½ oz.	300 hea <b>ds</b>
Carrots*	1 oz.	4 bu.
Kohlrabi	½ oz.	3–4 bu.
Lettuce	1 oz.	20 lbs.
Parsnips	½ oz.	2 bu.
Peas	3 lbs.	30 lbs.
Pumpkin	1 oz.	50–75 frui <b>ts</b>
Radish	½ oz.	50 bunches
Sweet Corn	1 lb.	1200 ears
Swiss Chard	½ oz.	50 lbs.
Squash	½ oz.	100 lbs.
Tomato <sup>5</sup>	¹⁄4 oz.	30 bu.
Turnips'	½ oz.	1 bu.
Onions	½ oz.	2–3 bu.
Potatoes	2 bu.	20–30 bu.

TABLE B

	Peas	Early Beets		
	Early Potatoes	Early Carrots		
ts	Mustard	Barly Cabbage		
wer	Kohlrabi	Horse Radish		
	Spinach	Salsify		
	Rutabaga			

Second, here are those which may be planted between the latter part of April and May 15;

Bush Beans	(Try a	a July plan	ting	Lat	e Cabbage	Late	Potatoes
	too :	for late cre	op) ¯	Sav	oy Cabbage	Rhub	arb
Wax Beans			• •	Col	lards	Peppe	ers
Green Beans	3			Cuc	umbers	Pump!	kins
Pole Beans				Mus	kmelon	Squa	sh
Sweet Corn	(Make	successive	plant-	0kr	a	Wate:	rmelon
	ings	up to July	lst)	Lim	a Beans		

Third, here are those plants which were started in hotbed or greenhouse and are to be transplanted between May 15 and June 1;

Brussels Sprouts Early Cabbage	Egg Plant Okra (Set out in June)
Cauliflower	Peppers
Cucumbers	Tomatoes

In the fourth group we have carrots, turnips and beets which can be sown in the garden again between July 15 and August 1.



Now, make a sketch of the shape your garden will take and divide it into the number of rows you will have. Next separate the garden into sections according to planting dates -- for example, one section of the garden will be planted to those vegetables which will be sown in April, another section to those to be sown in May, and so on.

Now, according to Table A, figure out how much seed you'll need for each vegetable, and about how many feet per row each will require. In this way, when your plan is completed, you'll know just how much room you'll need in your garden for all the vegetables you want.

# Getting the Soil Ready for Planting

Heavy soil, for best results, should be plowed late in the fall, just before freezing. The plot should be plowed 6 to 8 inches deep, the surface left rough. If you did not plow it last fall, however, you can do it this spring when the soil is slightly moist (not wet).

If you have light or sandy soil, fall plowing should not be more than six or seven inches deep. If there is danger of the soil blowing you should erect a windbreak on the north and east and apply a light top dressing of manure just following plowing. If manure is not available 150 to 200 lbs. of complete commercial fertilizer per acre will do a lot of good.

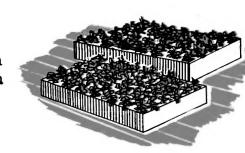
## Planting the Seeds



When you are ready to sow your seeds and set out your plants, dig and rake the ground once again. Go over it thoroughly until the soil is almost pulverized. Then smooth it out with the back of your rake, mark off your rows, and plant the seeds according to Table A.

In sowing the seeds some folks plant too thickly, others too thinly. Make sure of a good stand by using plenty of seed. Then when the plants have developed their second or third true leaves, thin them out. The plants you remove can be transplanted to another part of the garden, or if they are large enough, can be eaten. Depth of planting depends on variety of vegetable. Large seed crops can be planted deeper, generally not over 2 inches deep. Small seeds should be planted shallow, then covered with fine soil pressed firm over them.

When the seeds are planted, firm the ground with the back of a hoe or a board. Especially in the case of small seeds. In about a week go over the rows lightly with the rake, breaking the crust to let the vegetables through. This also kills weed seedlings.



## What About Transplanting?

Here are 7 ways to have more success in setting out your plants from the hotbed or cold frame.

- 1. Transplant young plants in the evening or on a cloudy day.
- 2. Set the plants one or two inches deeper than they were growing in the hotbed.
  - 3. Pack soil tightly around roots.
- 4. If soil is dry give each plant about one pint of water. Repeat this for two or three days if the weather is hot and dry.
- 5. To prevent baking and cracking of soil scoop dry earth over the moist earth about the plant.
- 6. Protect newly transplanted plants from hot noon-day sun and hot winds with boards or shingles.
- 7. Protect plants from cutworms by wrapping a piece of paper around the stem of each plant so that about one inch of paper is below the ground, and one inch above.



## Something to "TAKE TO HEART"

"One of the hardest lessons for the beginner to learn," says M. G. Kains in his remarkable book, Five Acres and Independence, "is that cheap seed is the most costly to buy! Why is it cheap? It may be -- probably is -- not true to name! It may be old -- 50 to 100% dead or at least weak! It may have been -- proba-

bly has been -- cheaply and therefore carelessly grown and poorly 'rogued' (if at all) or otherwise carelessly handled. In no branch of farming is it so true that the penny wise, pound foolish policy is so often or so strikingly illustrated as in the buying of cheap seed."

And Roy E. Biles, author of "The Complete Book of Garden Magic," says on page 198 of that book, "Poor seeds are expensive at any price. The labor and care needed to raise any plants justify paying a few cents more per package. Cheap seeds are cheaply grown, while good seeds from reputable seedsmen are grown in special soil under expert attention. No wonder they outdo home-gathered or bargain-price products."



## Remember This:

NO ONE can grow a good garden with poor seed. It costs little more to have seed you know is good -- it costs a great deal more in time, back-breaking labor and sweat to toil in vain in a garden that will not and cannot grow well.





Plant your garden with good seed, the very best you can buy. The difference in easier gardening, and tremendously greater yield will pay you back many, many times the slight difference in the original price of the seeds.

Here at the Michael-Leonard Company we not only go to great pains to produce for you the very finest in seed, but we also maintain a large research department that is ever at work developing new and better seeds to make your gardening easier and more productive. We use varieties developed especially for the Middle West, the East, and the South where they will do the best.

Almost all of our seed is grown in cool, inter-mountain valleys of the Rocky Mountain states. Things do a fine job of growing in those isolated valleys -- for there your seeds are free from contamination and disease.

They are seeds that not only grow, but grow better crops for you.

Sincerely,

## The Michael-Leonard Co.

- SIOUX CITY, IOWA CHICAGO, ILLINOIS BILLINGS, MONTANA
- P. S. More of these Illustrated Letters, covering other phases of gardening as well as storage and canning of vegetables are now being prepared. They will be sent you when they are ready. When you have finished with your copy, if you do not care to keep it, pass it along to a friend. Some of the hints in this letter may help him avoid errors that would waste seed -- seed, that in these days, is more precious than gold. If you want to keep your copy, however, and know of friends who would also like to be on the Michael-Leonard mailing list, send us their names.

# The Michael-Leonard Co. is creator and exclusive producer of lowealth Hybrid Corn